ASSIGNMENT 2

Module: Navigation Maps & Screen Hierarchy

Assignment Goal

Build a complete **Navigation Architecture** for the same product chosen in Assignment 1.
This architecture must include all primary, secondary, and tertiary screens, along with conditional and system-driven routes.

Instructions (Step-by-Step)

Step 1 – Extract the Complete Feature Inventory (Mandatory)

Using the decomposition, built in Assignment 1, students must:

1. Select all functional nodes that require screens.
2. Mark the difference between:
    - Interface-level nodes
    - System-level nodes
    - Background processes
3. Identify the following:
    - All features requiring a UI
    - All features requiring multiple screens
    - All features that generate dynamic content

This ensures that their navigation map is grounded in real functionality.

Step 2 – Group Features into Logical Navigation Clusters

Students must create clear groupings:

1. Main categories (Level 1)
2. Sub-categories (Level 2)
3. Micro-functions (Level 3)

Clusters must be designed using:

- Functional similarity
- Frequency of access
- Cognitive load
- Task sequences
- User goals
- System constraints

Marks are based on whether the structure is logical, symmetrical, and complete.

Step 3 – Define the Global Navigation Structure

Students must select an appropriate global pattern:

- Tab-based
- Drawer-based
- Hybrid
- Split navigation
- Top-level segmented navigation
- Contextual navigation

Must justify:

1. Why this pattern works for their product
2. Why other patterns were rejected
3. What alternatives exist and why they are not suitable

This justification section is required in the documentation.

Step 4 – Build the Complete Navigation Map

The navigation map must include:

1. All Level 1 screens
2. Level 2 screens branching from each Level 1 node
3. Level 3 screens where applicable
4. Alternative entry points
5. Contextual jumps
6. Redirection states
7. Auth and onboarding paths
8. System-driven routes (e.g., error screens, confirmation screens)

Students are expected to produce:

- One high-level navigation map (overview)
- One expanded map per Level 1 category
- One map showing conditional navigation

The navigation maps should be diagrammatic, not written.

Step 5 – Identify and Map Conditional Pathways

Students must add detailed conditional pathways such as:

- If user is logged out

- If user hasn't set up profile
- If user denies permission
- If data is unavailable
- If the system requires a validation stage
- If the user is on an outdated app version
- If an action requires admin approval

Each conditional path must be shown using decision nodes.

Step 6 – Define Mandatory System Routes

Students must map:

- Error handling routes
- Payment failures
- Server timeouts
- Retry screens
- Empty states
- Expired sessions
- Permission settings
- Forced update screens

These routes must appear *inside* the architecture, not as optional extras.

Step 7 – Provide Justification for Every Structural Decision

This must include:

- Why each Level 1 category exists
- Why the order of Level 1 categories is chosen
- Why certain screens are grouped under others
- Why some screens are removed or merged
- Why certain flows take priority

The student must defend their architecture through reasoning, not preference.

Documentation Requirements

Students must submit a **structured, well-written document** including:

1. Cover page
2. Abstract (4–5 lines summarizing the work)
3. Problem definition

4. Summary of feature inventory
5. Navigation grouping logic
6. Global navigation strategy (with visual and verbal explanation)
7. Complete navigation maps (all levels)
8. Conditional and system-driven flows
9. Rationale section
10. Key insights and learnings
11. References (if any)

Quality of writing, argumentation, and structural clarity are evaluated equally along with the diagrams.

Evaluation Criteria

1. Completeness of navigation map
2. Logical structuring of categories
3. Handling of system-driven routes
4. Depth of conditional flow coverage
5. Clarity of diagrams
6. Quality of documentation
7. Rationale and justification strength
8. Consistency with the product chosen in Assignment 1